#### PATENT COOPERATION TREATY

TRANSLATION From the INTERNATIONAL SEARCHING AUTHORITY WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION PCT-2501 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/JP2005/000120 07.01.2005 07.01.2004 International Patent Classification (IPC) or both national classification and IPC Applicant JISOUKEN CO., LTD. This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/JP Authorized officer

Telephone No.

Facsimile No.

International application No.
PCT/JP2005/000120

Box	No. I	Basis of this opinion
1.		regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under
	-	Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ation, this opinion has been established on the basis of:
	a.	type of material
		a sequence listing
		table(s) related to the sequence listing
	b.	format of material
		in written format
		in computer readable form
	c.	time of filing/furnishing
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Addi	tional comments:
		•

International application No.
PCT/JP2005/000120

l.	Statement			
	Novelty (N)	Claims	1-20	YES
		Claims		NO
	Inventive step (IS)	Claims	1-20	_ YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-20	YES
		Claims		NO

Document 1: JP 4-71257 A (Hitachi Ltd), 05 March 1992, page 3, upper right box, line 5 to bottom right box, line 13, Fig. 1, Fig. 2

Document 2: JP 6-275746 A (Hitachi Ltd), 30 September 1994, paragraphs 0014-0024, Figs. 1-12

Document 3: JP 11-54676 A (Ebara Densen Co Ltd), 26 February 1999, paragraphs 0011-0014, Figs. 1-4

Document 4: JP 4-243153 A (Actronics Inc), 31 August 1992, paragraph 0013, Figs. 9-11 Document 5: JP 4-206555 A (Hitachi Ltd), 28 July 1992, page 3, bottom left box, line 17 to page 4, bottom left box, line 20, Fig. 2

### Claims 1-20

A fin composed of a coiled metallic wire provided to a heat sink, wherein adjacent ring units are joined in mutually alternating positions, and formed flattened is neither described in any of documents 1-5, nor is it obvious to a person skilled in the art.

#### PATENT COOPERATION TREATY

TRANSLATION From the INTERNATIONAL SEARCHING AUTHORITY WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION PCT-2501 See paragraph 2 below International filing date (day/month/year) International application No. Priority date (day/month/year) PCT/JP2005/000120 07.01.2005 07.01.2004 International Patent Classification (IPC) or both national classification and IPC Applicant JISOUKEN CO., LTD. This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISAJP Authorized officer Facsimile No. Telephone No.

International application No.
PCT/JP2005/000120

Вох	No. I	Basis of this opinion
1.		regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under
	-	Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ation, this opinion has been established on the basis of:
	a.	type of material
		a sequence listing
		table(s) related to the sequence listing
	b.	format of material
		in written format
		in computer readable form
	c.	time of filing/furnishing
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Λddi	tional comments:
		•
		· ·

International application No.
PCT/JP2005/000120

Box No. V Reasoned statement under Ru citations and explanations sup			ule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; pporting such statement	
1.	Statement			
	Novelty (N)	Claims	1-20	YES
		Claims		NO NO
	Inventive step (IS	Claims	1-20	YES
		Claims		NO NO
	Industrial applical	bility (IA) Claims	1-20	YES
		Claims		NO NO

#### 2. Citations and explanations:

Document 1: JP 4-71257 A (Hitachi Ltd), 05 March 1992, page 3, upper right box, line 5 to bottom right box, line 13, Fig. 1, Fig. 2

Document 2: JP 6-275746 A (Hitachi Ltd), 30 September 1994, paragraphs 0014-0024, Figs. 1-12

Document 3: JP 11-54676 A (Ebara Densen Co Ltd), 26 February 1999, paragraphs 0011-0014, Figs. 1-4

Document 4: JP 4-243153 A (Actronics Inc), 31 August 1992, paragraph 0013, Figs. 9-11 Document 5: JP 4-206555 A (Hitachi Ltd), 28 July 1992, page 3, bottom left box, line 17 to page 4, bottom left box, line 20, Fig. 2

### Claims 1-20

A fin composed of a coiled metallic wire provided to a heat sink, wherein adjacent ring units are joined in mutually alternating positions, and formed flattened is neither described in any of documents 1-5, nor is it obvious to a person skilled in the art.

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHOR	ITY		ANC.	
To:			PCT PCT	
·			RITTEN OPINION OF THE CIONAL SEARCHING AUTHORITY	
			(PCT Rule 43bis.1)	
		Date of mailing (day/month/year)		
Applicant's or agent's file reference		FOR FURTHER ACTION		
PCT-2501			See paragraph 2 below	
International application No. PCT/JP2005/000120	International filing date (	(day/month/year)	Priority date (day/month/year) 07.01.2004	
International Patent Classification (IPC) or both	national classification an	nd IPC		
Applicant	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	<del></del>	
JISOUKEN CO., LTD.				
This opinion contains indications rela	ting to the following item:	s:		
Box No. I Basis of the				
Box No. II Priority	орныон	•		
	-h	regard to novelty, inventive step and industrial applicability  is.1(a)(i) with regard to novelty, inventive step or industrial ons supporting such statement		
Box No. V Reasoned st				
	uments cited			
	ects in the international ap			
	ervations on the internation	•		
International Preliminary Examining	Authority ("IPEA") except chosen IPEA has notified	ot that this does not ap I the International Bur	Il be considered to be a written opinion of the ply where the applicant chooses an Authority other reau under Rule $66.1bis(b)$ that written opinions of	
	oriate, with amendments,	before the expiration	A, the applicant is invited to submit to the IPEA a n of 3 months from the date of mailing of Form expires later.	
For further options, see Form PCT/IS.	A/220.			
3. For further details, see notes to Form	PCT/ISA/220.		•	
Name and mailing address of the ISA/JP		Authorized officer		
Facsimile No.		Telephone No.		

International application No.
PCT/JP2005/000120

Вох	No. I	Basis of this opinion
1.		regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under
		Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed antion, this opinion has been established on the basis of:
	a.	type of material
		a sequence listing
		table(s) related to the sequence listing
	Ъ.	format of material
		in written format
		in computer readable form
	c.	time of filing/furnishing
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Addi	itional comments:
•		
	•	

International application No.
PCT/JP2005/000120

Box			ale 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; pporting such statement	
1.	Statement			
	Novelty (N)	Claims	1-20	_ YES
		Claims		_ NO
	Inventive step (IS)	Claims	1-20	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-20	_ YES
		Claims		_ NO
2.	bottom right box, line Document 2: JP 6-275 1-12 Document 3: JP 11-54 0014, Figs. 1-4 Document 4: JP 4-243	13, Fig. 746 A ( 676 A ( 153 A (	Hitachi Ltd), 30 September 1994, paragraphs 0014-0024, Ebara Densen Co Ltd), 26 February 1999, paragraphs 001 Actronics Inc), 31 August 1992, paragraph 0013, Figs. 9-	Figs 11-
,	page 4, bottom left bo	-	Hitachi Ltd), 28 July 1992, page 3, bottom left box, line 1 0, Fig. 2	. 7 10

### Claims 1-20

A fin composed of a coiled metallic wire provided to a heat sink, wherein adjacent ring units are joined in mutually alternating positions, and formed flattened is neither described in any of documents 1-5, nor is it obvious to a person skilled in the art.